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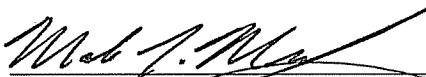
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in the following listed application(s) or patent(s) for which the issue fee has been paid.

<u>Patent No.</u>	<u>Serial No.</u>	<u>Patent Date</u>	<u>Filing Date</u>	<u>Confirmation No.</u>	<u>Attorney Docket No.</u>
7,737,626 B2	10/581,410	06/15/2010	06/01/2006	3756	0553-0504

Respectfully Submitted,



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(12) **United States Patent**
Kumaki et al.

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(54) **LIGHT EMITTING ELEMENT**

FOREIGN PATENT DOCUMENTS

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EP 0 855 848 A2 7/1998

(73) Assignee: **Semiconductor Energy Laboratory Co., Ltd.** (JP)

(Continued)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 203 days.

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Tang, C.W. et al, "Organic Electroluminescent Diodes," Appl. Phys. Lett., vol. 51, No. 12, pp. 913-915, Sep. 21, 1987.

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(57) **ABSTRACT**

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H01J 1/62 (2006.01)

(52) **U.S. Cl.** 313/504; 428/690

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See application file for complete search history.

(56) **References Cited**

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(Continued)

It is an object of the present invention to provide a light-emitting element having a structure in which the drive voltage is relatively low. Further, it is an object of the invention to provide a highly reliable light emitting device by alleviating the stress to the light emitting layer. Further, it is another object of the invention to provide a light emitting element having a structure in which increase in the drive voltage over time is small. It is an object of the present invention to provide a display device in which the drive voltage is low and increase in the drive voltage over time is small and which can withstand long-term use. In a light emitting element, a layer in contact with an electrode serves as a hole generating layer such as an organic compound layer containing a P-type semiconductor or an electron accepting material, a light emitting layer is provided between hole generating layers, an electron generating layer is formed between the hole generation layer on the cathode side and the light emitting layer.

28 Claims, 19 Drawing Sheets

